

REMARKS

Claims 27, 29, 30, 32, 37-40, 43, 45-50, and 52-55 are pending in the application.

Claims 27-55 have been rejected.

Claims 27, 29, 30, 32, 37-40, 43, 45, 47-50, and 52 have been amended.

Claims 28, 31, 33-36, 41, 42, 44, and 51 have been canceled.

Claims 46, and 53-55 are kept unchanged.

35 U.S.C. 112 first paragraph – Claims 27-55

The rejection of claims 27-55 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way to reasonably convey to one skilled in the relevant art, that the inventor(s) at the time the application was filed, had possession of the claimed invention, is respectfully traversed and is addressed in light of the comments below.

The terms “non-carbon-based carboxylic function” has been deleted from the claims and replaced with the terms: “carboxylic acid function or salts thereof”. Support for these terms is to be found more particularly from page 7, line 21 to page 8, line 7, page 8, line 16 to page 9, line 9, former claim 9 and the examples. According to the instant specification, the “non-carbon-based carboxylic function” is preferably an acid function (-COOH) and salts thereof. According to the formula (-COOH) and page 8, line 16, the acid function is a carboxylic acid function. Therefore, the “non-carbon-based carboxylic

function” has been clearly defined by Applicant as a “carboxylic acid function or salts thereof”.

In view of the above comments, the rejection of claims 27-55 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way to reasonably convey to one skilled in the relevant art, that the inventor(s) at the time the application was filed, had possession of the claimed invention, should be withdrawn.

35 U.S.C. 112 second paragraph – Claim 27-55

The rejection of claims 27-55 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention, is respectfully traversed and is addressed in light of the comments below.

The terms “non-carbon-based carboxylic function” has been deleted from the claims and replaced with the terms: “carboxylic acid function or salts thereof”. Support for these terms is to be found more particularly from page 7, line 21 to page 8, line 7, page 8, line 16 to page 9, line 9, former claim 9 and the examples. According to the instant specification, the “non-carbon-based carboxylic function” is preferably an acid function (-COOH) and salts thereof. According to the formula (-COOH) and page 8, line 16, the acid function is a carboxylic acid function. Therefore, the “non-carbon-based carboxylic function” has been clearly defined by Applicant as a “carboxylic acid function or salts thereof”.

The invention as claimed relates to an isocyanate composition partially masked, comprising at least one carboxylic acid function or salts thereof and being at least partially masked with at least one masking agent. The masking agent does not bear a carboxylic acid function or salts thereof. The carboxylic acid function of the isocyanate composition is grafted onto the composition by reaction of a precursor of said composition via an agent bearing the carboxylic acid function and a function which reacts with a free isocyanate function (please see page 3, lines 10-20). The ratio in equivalents between the carboxylic acid functions or their salts thereof, on the one hand, and the isocyanate functions which are masked, free and which have reacted with the agent bearing carboxylic acid functions, on the other hand, is at least equal to 5%, and is not more than  $2/3$  (please see claims 6 and 7 initially filed).

The terms "which have reacted with any agent bearing carboxylic functions, on the other hand" has been amended in claim 27 into: - - which have reacted with the agent bearing carboxylic acid functions, on the other hand- -. The reaction of the isocyanate with said agent finds antecedent basis in claim 27. According to the wording of claim 27, it is clear that the terms "which have reacted with any agent bearing carboxylic functions" are not necessarily included within the previous "masked" language, because the carboxylic acid containing compound is not referred to as the masking agent.

The objection relative to the terms "said masking agent containing a carboxylic function" used in claims 37-41, is now moot because claims 37-41 have been canceled.

The terms "said masked aliphatic function" have been amended into - -said masked aliphatic isocyanate function- -. The terms "said aliphatic function" have been amended into - -said aliphatic isocyanate function- -. The word "type" has been deleted from claim 47.

The term "several" has been canceled from claims 49 and 50 and claim 51 has been canceled.

The terms "the masking agent not bearing a carboxylic function" has been amended into- - the masking agent not bearing a carboxylic acid function - - which find antecedent basis.

In view of the above comments, the rejection of claims 27-55 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention, should be withdrawn.

35 U.S.C. 112 first paragraph – Claims 41-42

The rejection of claims 41 and 42 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way to reasonably convey to one skilled in the relevant art, that the inventor(s) at the time the application was filed, had possession of the claimed invention, is now moot because claims 41 and 42 have been canceled.

35 U.S.C. 102(e)

The provisional rejection of claims 27-43, 46-51, and 55 under 35 U.S.C. 102 (e) as being anticipated by copending Application No.: 08/960,620, is respectfully traversed and is addressed in light of the comments below.

The instant invention as now claimed, relates to an isocyanate composition which is at least partially masked by at least one masking agent not bearing a carboxylic acid function or salts thereof. Copending Application No.: 08/960,620 cannot anticipate the instant invention because said application does not teach that feature.

In view of the above comments, the rejection of claims 27-43, 46-51, and 55 under 35 U.S.C. 102 (e) as being anticipated by copending Application No.: 08/960,620, should be withdrawn.

Obviousness-type double patenting

The provisional rejection of claims 27-43, 46-51, and 55 under 35 U.S.C. 102 (e) under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-10, 13, and 15-27 of copending Application No.: 08/960,620, is respectfully traversed and is addressed in light of the comments below.

The instant invention as now claimed, relates to an isocyanate composition which is at least partially masked by at least one masking agent not bearing a carboxylic acid function or salts thereof. Claims 1, 4-10, 13, and 15-27 of copending Application No.: 08/960,620 do not describe nor suggest the instant invention because said claims does not teach that feature.

In view of the above comments, the provisional rejection of claims 27-43, 46-51, and 55 under 35 U.S.C. 102 (e) under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-10, 13, and 15-27 of copending Application No.: 08/960,620, should be withdrawn and, indeed, claims 27-43, 46-51, and 55 are directed to an invention patentably distinct from claims 1, 4-10, 13, and 15-27 of copending Application No.: 08/960,620.

102(f)/103(a) or 102(g)/103(a) Issue – Commonly owned inventions

Examiner has requested the Assignee to show that conflicting inventions were commonly owned at the time the invention was made, in order to resolve a 102(f)/103(a) or 102(g)/103(a) issue.

Applicant submits that the instant invention was owned by, or subjected to an obligation of assignment to the same person at the time the invention in the instant application was made.

In that connection, Applicants are herewith enclosing copies of:

The assignment of copending Application No.: 08/960,620 and the notice of recordation thereof (Application No.: 08/960,620 being a continuation application of parent application 08/434,535, the copy of the assignment and of the notice of recordation thereof are enclosed), and the attestation of change of name of Rhone-Poulenc Chimie into Rhodia-Chimie, and

The assignment of instant Application No.: 09/463,525 and the notice of recordation thereof.

According to 37 C.F.R. 1.104 (a) (5) (i) and MPEP 706.02(II), Applicant submits that the enclosed documents are sufficient to show that the instant invention was owned by, or subjected to an assignment to, the same person at the time the invention in the instant application was made. Therefore, Applicants submit that a rejection under 35 U.S.C. 103 (a) based upon the commonly assigned case as a reference under 35 U.S.C. 102 (f) or (g) is precluded according to 35 U.S.C. 103 (c).

35 U.S.C. 103(a) over EP 680,984 in view of JP 850290248

The rejection of claims 35, 36, 44, 45 and 52-54, under 35 U.S.C. 103 (a) as being unpatentable over EP 680,984 in view of JP 850290248, is respectfully traversed and is addressed in light of the comments below.

The rejection of claims 35, 36, 44, 45, under 35 U.S.C. 103(a) as being unpatentable over EP 680,984 in view of JP 850290248, is now moot, because claims 35, 36, 44 have been canceled and claim 44 has been amended and now depends upon claim 27. Claims 52-54 in fact depend upon claim 27, which is patentable over EP 680,984 in view of JP 850290248. Therefore, Claims 52-54 are also patentable over EP 680,984 in view of JP 850290248.

In view of the above comments, the rejection of claims 35, 36, 44, 45 and 52-54, under 35 U.S.C. 103 (a) as being unpatentable over EP 680,984 in view of JP 850290248, should be withdrawn.

35 U.S.C. 102(b) by EP 56167

The rejection of claims 27-55 under 35 U.S.C. 102 (b) as being anticipated by EP 56167, is respectfully traversed and is addressed in light of the comments below.

EP 56167 relates to a combination of (A) polyurethane prepolymers containing carboxyl groups and derived from polyisocyanate, hydroxycarbocyclic acids and blocking agents containing 1-40% of blocked isocyanate groups, and (B) homo-or hetero functional groups containing or generating hydroxyl groups (such as epoxide) in order to obtain a cross-linked product with a low COOH-groups contain.

EP 56167 does not teach an isocyanate composition whose masking agent does not a carboxylic acid function or salts thereof and presenting one carboxylic acid function being grafted onto the isocyanate composition by reaction of a precursor of said composition via an agent bearing the carboxylic acid function and a function which reacts with a free isocyanate function. Moreover, EP 56167 does not teach a ratio in equivalents between the carboxylic acid functions or their salts thereof, on the one hand, and the isocyanate functions which are masked, free and which have reacted with the agent bearing carboxylic acid functions, on the other hand, is at least equal to 5%, and is not more than one third. EP 56167 does not suggest that the instant isocyanate composition presents the unexpected property of increasing the glass transition temperature T<sub>g</sub>. According to examples 7-9 and 16-19 of the instant specification, T<sub>g</sub> increases from below 0°C to a value from 20 to 40 °C

In view of the above comments, the rejection of claims 27-55 under 35 U.S.C. 102 (b) as being anticipated by EP 56167, should be withdrawn.



RN97085  
Serial 09/463,525  
Amendment

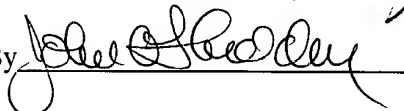
In view of the preceding remarks, it is asserted that the present application is in condition for allowance. Should the Examiner have any questions regarding these remarks, which would further advance prosecution of the claims to allowance, the examiner is cordially invited to telephone the undersigned attorney at (609) 860-4190. A Notice of Allowance is respectfully solicited.

October 8, 2001

Rhodia Inc.  
259 Prospect Plains Road  
CN7500  
Cranbury, NJ 08512

Respectfully submitted,

By



John A. SHEDDEN  
Registration No. 25,644  
Tel: (609) 860-4190  
Fax: (609) 860-0503

RN97085 amend.doc

**Marked-up amended claims**

Please amend claim 27 as follows:

27. (Amended) An isocyanate composition which is at least partially masked, comprising at least one [non-carbon-based] carboxylic acid function or salts thereof and being at least partially masked with at least one masking agent, said one masking agent not bearing a carboxylic acid function or salts thereof and said one carboxylic acid function being grafted onto the isocyanate composition by reaction of a precursor of said composition via an agent bearing the carboxylic acid function and a function which reacts with a free isocyanate function, wherein the ratio in equivalents between the carboxylic acid functions or their salts thereof, on the one hand, and the isocyanate functions which are masked, free and which have reacted with the agent bearing carboxylic acid functions, on the other hand, is at least equal to 5%, and is not more than 2/3.

Please cancel claim 28.

Please amend claim 29 as follows:

29. (Amended) A composition according to Claim 28, wherein said agent bearing a carboxylic acid function and a function which reacts with a free isocyanate function is a masking agent bearing a carboxylic acid function.

Please amend claim 30 as follows:

30. (Amended) A composition according to Claim 27, wherein said composition is a composition masked with at least two masking agents, at least one of which contains a [non-carbon-based] carboxylic acid function.

Please cancel claim 31.

Please amend claim 32 as follows:

32. (Amended) A composition according to Claim [31] 27, wherein the ratio is at least equal to 20%.

Please cancel claims 33 to 36.

Please amend claim 37 as follows:

37. (Amended) A composition according to Claim 27, wherein said masking agent containing a carboxylic acid function represents, in equivalents, at least 10% of the masking agent.

Please amend claim 38 as follows:

38. (Amended) A composition according to Claim 37, wherein said masking agent containing a carboxylic acid function represents, in equivalents, at least 20% of the masking agent.

Please amend claim 39 as follows:

39. (Amended) A composition according to Claim 27, wherein said masking agent containing a carboxylic acid function contains, per masking agent, not more than 4 freely rotating methyl or methylene groups.

Please amend claim 40 as follows:

40. (Amended) A composition according to Claim 39, wherein said masking agent containing a carboxylic acid function contains, per masking agent, not more than 2 freely rotating methyl or methylene groups.

Please cancel claims 41 and 42.

Please amend claim 43 as follows:

43. (Amended) A composition according to Claim 27, wherein said carboxylic acid function is directly [linked] onto an aromatic ring of the isocyanate composition.

Please cancel claim 44.

Please amend claim 45 as follows:

45. (Amended) A composition according to Claim 44, wherein the masking agent not bearing a carboxylic acid function or salts thereof is selected from the group consisting of oximes, lactams, pyrazoles, and triazoles.

Please amend claim 47 as follows:

47. (Amended) A composition according to Claim 46, wherein said masked aliphatic isocyanate function is connected via an  $sp^3$ -[type] carbon, optionally bearing one or two hydrogen atoms.

Please amend claim 48 as follows:

48. (Amended) A composition according to Claim 47, wherein said aliphatic isocyanate function is neither secondary nor tertiary nor neopentyl.

Please amend claim 49 as follows:

49. (Amended) A composition according to Claim 48, wherein said isocyanate composition is obtained from an at least partial masking of a mixture obtained by oligomerization or oligocondensation [starting with several] of monomers, at least one of which contains at least one aliphatic isocyanate function which is neither secondary nor tertiary nor neopentyl.

Please amend claim 50 as follows:

RN97085  
Serial 09/463,525  
Amendment

50. (Amended) A composition according to Claim 48, wherein said isocyanate composition is obtained from an at least partial masking of a mixture obtained by oligomerization or oligocondensation [starting with several] of monomers, at least one of which contains at least two aliphatic isocyanate functions which are neither secondary nor tertiary nor neopentyl.

Please cancel claim 51.

Please amend claim 52 as follows:

52. (Amended) A composition according to Claim 27, wherein the masking agent not bearing a carboxylic acid function is a triazole.